No. 728,482. PATENTED MAY 19, 1903.

E. MAAG.

SIFTING APPARATUS.

APPLICATION FILED OCT. 15, 1900.

NO MODEL.

Fig. 1.

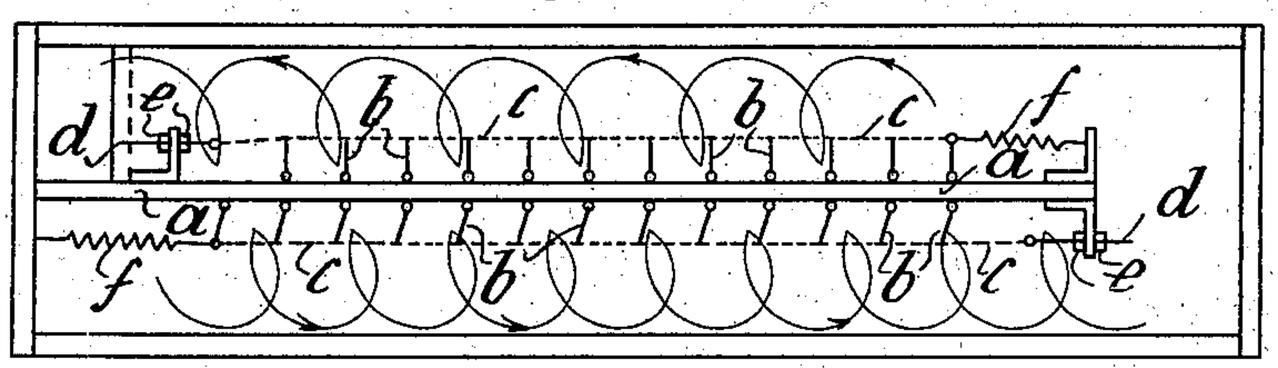


Fig. 2.

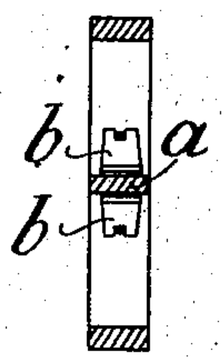


Fig. 3.

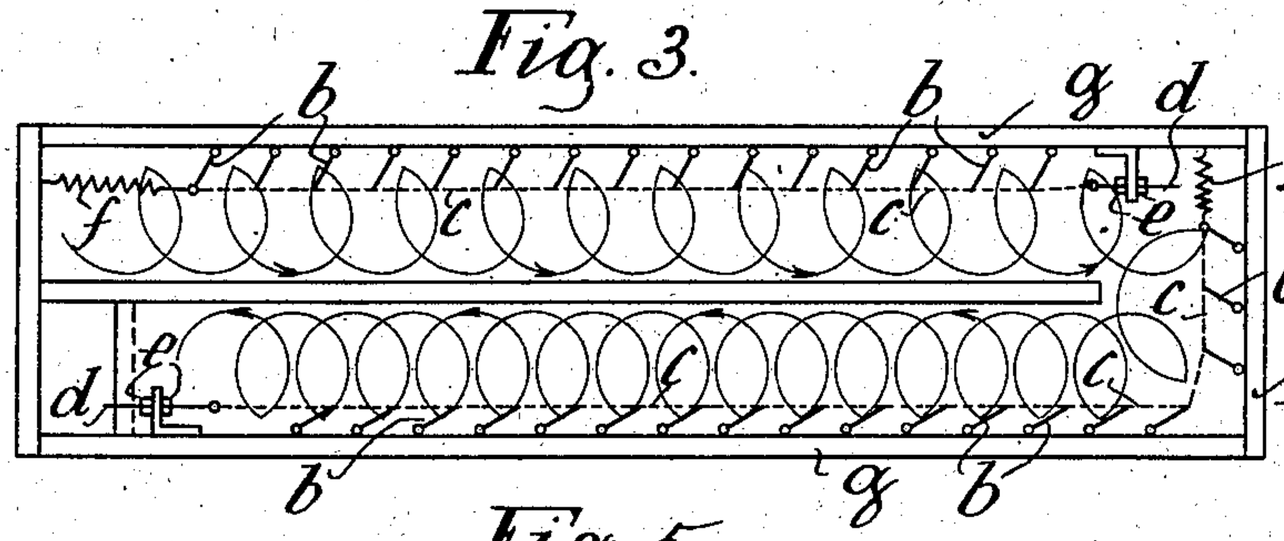


Fig. 4.

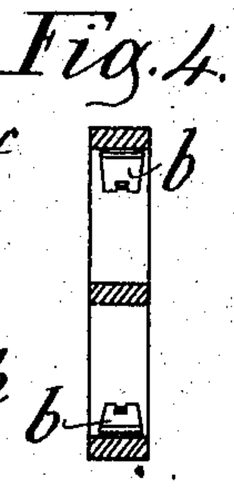


Fig. 5.

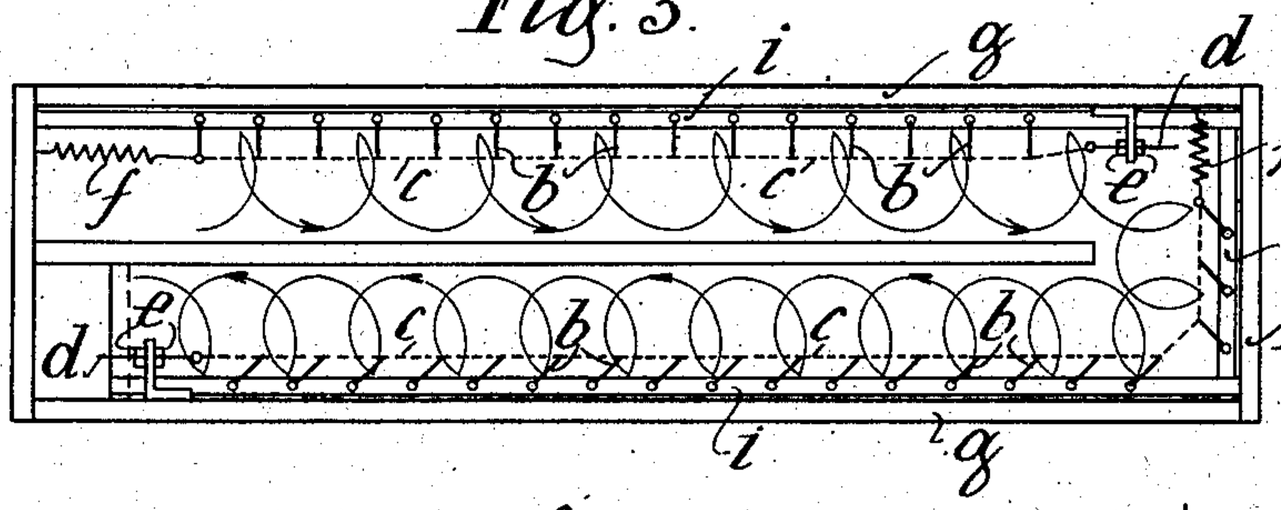


Fig. 6

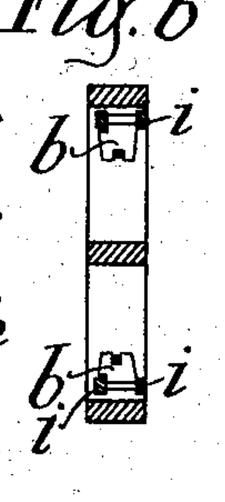


Fig. 7.

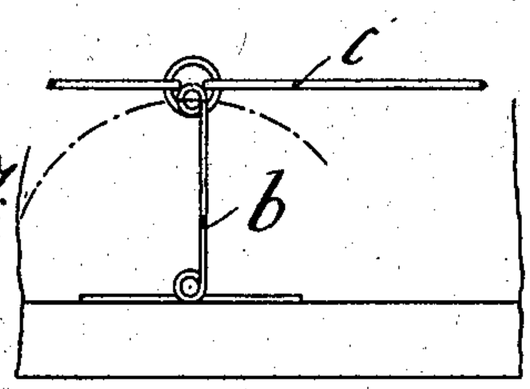


Fig. 8.

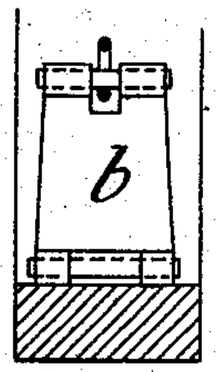


Fig. 9.

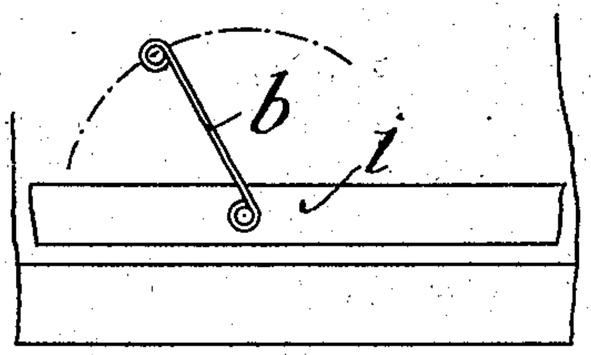
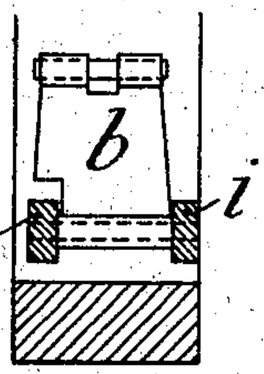
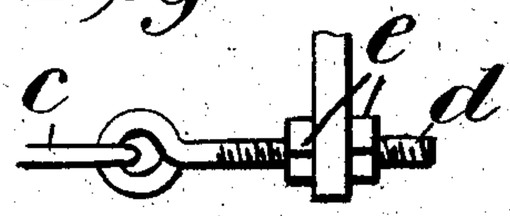


Fig10.



Witnesses
L. Brashears
Richard Latzen

Fig. 11.



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No. 728,482. Patented May 19, 1903.

UNITED STATES PATENT OFFICE.

ENRICO MAAG, OF ZURICH, SWITZERLAND.

SIFTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 728,482, dated May 19, 1903.

Application filed October 15, 1900. Serial No. 33,144. (No model.)

To all whom it may concern:

Be it known that I, ENRICO MAAG, a citizen of the Republic of Switzerland, residing at 12 Waisenhausgasse, Zurich, Switzerland, have invented certain new and useful Improvements in Sifting Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to sifting apparatus in which there are used plane sieves with parallel circular movement; and it consists in the addition of certain slats arranged in the channels of the sieve, the said slats being adjustable and having the purpose of causing the material which is being sifted upon the sieve to be retained for a longer or shorter period, according to their adjustment—that is to say, of enabling the material to be sifted more or less finely or perfectly.

Figure 1 illustrates diagrammatically in plan view a sieve embodying my invention and the direction of feed of the material being sifted. Fig. 2 is a transverse sectional view of the construction shown in Fig. 1. Figs. 3 and 4 are views similar to Figs. 1 and 2, the construction shown and the direction of movement of the sifting material being modified. Figs. 5 and 6 are views also similar to Figs. 1 and 2, the construction and movement of the material being still further modified. Figs. 7 and 8 are fragmentary detail views, on an enlarged scale, representing, respectively, in plan and transverse sectional views one of the slats and its immediate connections. Figs. 9, 10, and 11 are fragmentary detail views, on an enlarged scale, representing, respectively, in plan and transverse sectional views one of the slats as illustrated in Figs. 5 and 6 and its immediate connections.

Like letters of reference mark similar parts wherever they occur in the several figures of the drawings.

I will now particularly describe the construction and operation of my invention, referring to the drawings by letters of reference.

The plane sieve represented in Figs. 1 and 2 is divided by a partition *a* into two sieve-channels. At either side of the said partition *a* slats *b*, moving on pivots placed at right angles to the face of the sieve, are provided. The slats *b* on either side of the partition *a* are interconnected by means of any suitable connecting means *c* and can by turning the nuts *e* of the screws *d*, articulated to the slats *b* at one end of either set, be adjusted at any angle to the partition *a*.

In order that after unscrewing the nuts *e* the slats *b* may automatically reassume their original position, one end of the helical springs *f* is attached to each of the other end slats *b*, the other ends of the said springs being fastened to the sieve. In the plane sieve represented in Figs. 3 and 4 the adjustable slats *b* are placed on the insides of the outer walls *g* and *h* of the sieve. In the plane sieve represented in Figs. 5 and 6 the said slats *b* are placed on bars *i*, running parallel to the outer walls *g* and *h* of the sieve.

The effect of the adjustable slats *b* upon the sieve material being sifted is indicated in Figs. 1, 3, and 5 by trajectory curves. It is assumed that the sieves have a circular motion in the direction opposite to that of the hands of a clock. If the slats *b* are adjusted in such a manner as to form right angles with the walls of the sieve to which they are attached, the loop of the curves is narrow. If they form, however, acute and obtuse angles, respectively, the loops of the curves become wider, and consequently the passage of the material over the surface of the sieve is retarded, Fig. 3. By suitably adjusting the slats it is therefore possible to retain the material upon the sieve for a longer or shorter period, and therefore to sift the said material more or less finely or perfectly.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

A plane sieve provided with longitudinal channels, a series of interconnected parallel slats secured pivotally to the walls of the sieve-channels and projecting into said channels transversely to the path of the sifting material, means for adjusting the series in one direction, and a spring for returning the series in the opposite direction when released, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ENRICO MAAG.

Witnesses:

A. LIEBERKNECHT,

G. BILLIAN, Fils.